NEW MEXICO
ENVIRONMENT DEPARTMENT

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Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

Certified Mail – Return Receipt Requested

March 13, 2015

Ms. Tyler Lown Vandenburg, Manager
Corporate Operations
Menefee Mining Corporation
8144 Walnut Hill Lane, Suite 987
Dallas, Texas 75231

Re: Menefee Mining Corporation, Cuba Humate Production Facility; Unpermitted MSGP; SIC 1499, 1479 and/or 2879; NPDES Compliance Evaluation Inspection; NMU001887; March 4, 2015

Dear Ms. Vandenburg:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
Fountain Place
1445 Ross Avenue
Dallas, Texas 75202-2733

Bruce Yurdin
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Erin Trujillo at 505-827-0418 or at erin.trujillo@state.nm.us.

Sincerely,

/s/Bruce J. Yurdin

Bruce J. Yurdin
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Racquel Douglas, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WC) e-mail
Darlene Whittten-Hill (USEPA (6EN) e-mail
Bill Chavez, NMED District I by e-mail
David (DJ) Ennis, MMD by e-mail
John Loan, Earthgreen Products Inc., Dallas, Texas by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
N	NMU0018887	150304	~	S	2

Remarks: HUMATE MILL & PROCESSING

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
	2	N	N	

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time /Date	Permit Effective Date
Menefee Mining Corporation, Cuba Humate Production Facility, 36 Duke City Road, Cuba, NM 87013. Sandoval County	~1215 hours / 03/04/2015	September 29, 2008
	Exit Time/Date: ~1400 hours / 03/04/2015	Permit Expiration Date: September 29, 2013

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Mr. Aaron Valdez, Plant Manager, Cuba Humate Production Facility / 575-289-0259, fax 575-289-0263

Other Facility Data
Entrance
Latitude: 35.988469°
Longitude: -106.957110°

SIC 1499, 1479 and/or 2879
MSGP Sectors J & C

Name, Address of Responsible Official/Title/Phone and Fax Number
Ms. Tyler Lown Vandenburg, Manager, Corporate Operations
8144 Walnut Hill Lane, Suite 987, Dallas, Texas 75231 / 214-750-4696, fax 214-750-1158

Contacted: Yes [*] No [ ]

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit	N	Flow Measurement	N	Operations & Maintenance	N	CSO/SSO
N	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
N	Effluent/Receiving Waters	N	Laboratory	U	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Menefee Mining Corporation, an active corporation in the State of New Mexico with a filing date of June 26, 1991 according to State of New Mexico Office of the Secretary of State corporation on-line query, did not submit a Notice of Intent (NOI) to obtain coverage for the Cuba Humate Production Facility at the above-described location under the USEPA National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Multi-Sector General Permit (MSGP) by the deadline of the 1995, 2000 or 2008 MSGP or the expiration date of September 29, 2013 of the 2008 MSGP. See attached report and further explanations.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Erin S. Trujillo */s/Erin S. Trujillo*	**NMED/SWQB/505-827-0418**	**03/13/2015**
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
Sarah Holcomb */s/Sarah Holcomb*	**NMED/SWQB/505-827-2798**	**03/13/2015**

Menefee Mining Corporation – Cuba Humate Production Facility
Compliance Evaluation Inspection
NPDES Permit No. NMU001887
March 4, 2015

Further Explanations

Introduction

On March 4, 2015, a Compliance Evaluation Inspection (CEI) was conducted by Erin S. Trujillo, accompanied by Daniel Valenta, both of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) at the Menefee Mining Corporation, Cuba Humate Production Facility located at 36 Duke City Road, Cuba, New Mexico in Sandoval County (See Figure 1 General Location Map and Figure 2 Facility Map). The purpose of this inspection was to document the operator's status regarding the National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater discharges associated with industrial activity under 40 Code of Federal Regulations (CFR) 122.26 and U.S. Environmental Protection Agency (USEPA) industrial stormwater Multi-Sector General Permit (MSGP).

Stormwater runoff is to the south-southwest to an unnamed unclassified tributary subject to Segment 20.6.4.98 Standards for Interstate and Intrastate Surface Waters, New Mexico Administrative Code (NMAC) with designated uses of livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact, thence to the Rio Puerco, from the confluence of Arroyo Chijuilla upstream to the northern boundary of Cuba, in Segment 20.6.4.131 NMAC in the Rio Grande Basin. The watercourse at and west of the site appears interrupted by manmade berms and agricultural activities based on a review of aerial photographs and topographic maps. Figure 3 is a portion of a Flood Insurance Rate Map that shows the location of Flood Zone A in the Rio Puerco watershed which is approximately 3000 feet west of the site. Rio Puerco, approximately 2 miles west of the site, has designated uses of warmwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact. Rio Puerco assessment unit NM-2107.A_40 is listed as not supporting aquatic life use with listed causes of sedimentation/siltation, nutrient/eutrophication, aluminum, and unionized ammonia. The listed probable sources are channelization, wildlife other than waterfowl, drought-related impacts, loss of riparian habitat, road/bridge runoff, natural sources, rangeland grazing, and streambank modifications/destabilization. A Total Maximum Daily Load was prepared for sedimentation, chronic AL, and nutrients (2007) and is available at NMED SWQB web sites:

http://www.nmenv.state.nm.us/swqb/RioPuerco/index.html
http://www.nmenv.state.nm.us/swqb/RioPuerco2/index.html

NMED performs a certain number of CEIs for the USEPA each year. The purpose of this inspection is to provide USEPA with information to evaluate the operator's compliance with NPDES and the MSGP permit. This report is based on review of USEPA's on-line notice of intent (eNOI) database, files maintained by the operator and NMED, on-site observation by NMED personnel, and verbal information provided by the operator's representatives.

Upon arrival at approximately 1215 hours on the day of this CEI, Ms. Trujillo made introductions and presented credentials to Mr. Aaron Valdez, Plant Manager, Cuba Humate Production Facility, Menefee Mining Corporation. Ms. Tyler Lown Vandenburg, Manager, Corporate Operations, Menefee Mining Corporation, Dallas, Texas was contacted by telephone during the CEI. Ms. Trujillo discussed the purpose of the inspection with Mr. Valdez and Ms. Vandenburg. The inspectors and Mr. Valdez toured the facility. Following the tour, an exit interview was conducted on site with Mr. Valdez. The inspectors left the facility at approximately 1400 hours on the day of this CEI. Ms. Trujillo contacted Ms. Vandenburg by telephone to obtain additional information on March 9, 2015.

Federal Clean Water Act (CWA) and Industrial Stormwater Permit Requirements

Section 301 (a) of the Federal Water Pollution Control Act states that *"Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful."* Federal regulations in 40 CFR Part 122.21(a) Duty to apply (1) states: *"Any person who discharges or proposes to discharge pollutants…must submit a complete application to the Director in accordance with this section and part 124 of this chapter."*

Eleven (11) categories of "Storm Water Discharges Associated with Industrial Activity" are defined in 40 CFR 122.26(b)(14)(i)-(xi) that require coverage under an NPDES permit. Industrial stormwater has been regulated since the promulgation of USEPA's 1990 stormwater regulations. The definition uses either Standard Industrial Classification (SIC) codes or narrative descriptions to characterize the activities. SIC codes have been replaced by the North American Industry Classification System (NAICS). Until EPA modifies regulations referring to the newer NAICS system, the older SIC codes will continue to be utilized. Links to more information on SIC and NAICS system include:

https://www.osha.gov/pls/imis/sicsearch.html
http://www.census.gov/eos/www/naics/index.html

SIC code and/or activity that best describes the primary industrial activities for which the facility is primarily engaged and co-located activities is to be determined by the owner/operator. Industrial stormwater category (iii) in 40 CFR 122.26(b)(14) includes active or inactive mining operations with Standard Industrial Classification (SIC) Group 14 Mineral Industry (non-metallic minerals except fuels). SIC 1499 (miscellaneous nonmetallic minerals, except fuels) includes establishments primarily engaged in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, except fuels. SIC 1479 (chemical and fertilizer mineral mining, not elsewhere classified) includes establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, not elsewhere classified. Category (ii) includes manufacturing establishments with SIC Group 28 Chemicals & Allied Products. SIC 2879 (Pesticides and Agricultural Chemicals, Not Elsewhere Classified) includes establishments engaged in manufacturing or formulating agricultural chemicals, not elsewhere classified, such as minor or trace elements and soil conditioners.

USEPA's first MSGP for stormwater discharges associated with industrial activity was published on September 29, 1995 (Federal Register Volume 60, No. 189 on Friday 29, 1995, page 50953), and has since been reissued in 2000 and 2008. USEPA 2008 MSGP was re-issued effective September 29, 2008 (Federal Register/Vol. 73, No. 189/Monday, September 29, 2008 pg. 56572) and replaced the 2000 MSGP which expired on October 30, 2005. Appendix D (Facilities and Activities Covered) of the 2008 MSGP lists:

Sector	SIC	Activity Represented
J2	1499	Miscellaneous Nonmetallic Minerals, Except Fuels
J3	1479	Chemical and Fertilizer Mineral Mining
C1	2879	Agricultural Chemicals

To obtain permit coverage under the MSGP, an operator must complete, or update, a Stormwater Pollution Prevention Plan (SWPPP) that documents eligibility for permit coverage, and submit a notice of intent (NOI) to the USEPA. Among other things, requirements in the MSGP include site-specific best management practices (BMPs), maintenance plans, inspections, employee training and annual reporting. BMPs include good housekeeping practices, minimizing exposure, erosion and sediment control, and management of runoff. The MSGP also requires visual, and, for some sectors, analytical monitoring to determine the effectiveness of implemented BMPs.

The Federal Register notice announcing the proposed reissuance of the MSGP was published on September 27, 2013. Facilities that obtained coverage under the 2008 MSGP prior to its expiration were

automatically granted an administrative continuance of permit coverage, and the administrative continuance will remain in effect until a new permit is issued. Facilities already covered under the 2008 MSGP are not required to submit a new NOI for permit coverage until the new MSGP is issued, and these facilities must continue to comply with all of the requirements in the 2008 permit, including requirements for monitoring and reporting.

Until the new MSGP is issued, "new" facilities (i.e., those facilities not covered under the 2008 MSGP) that begin discharging industrial stormwater after September 29, 2013 are unable to file a NOI for general permit coverage. USEPA's No Action Assurance (NAAs) Memorandum dated March 27, 2014 covered newly-discharging facilities, provided that these facilities: (1) meet the 2008 MSGP eligibility criteria; (2) notify the appropriate USEPA permitting authority of their operator status and their intention to operate in accordance with the 2008 MSGP; and (3) comply with all requirements of the 2008 MSGP including, but not limited to, SWPPP development and implementation and proper installation and maintenance of best management practices.

More information on USEPA MSGP and status of the proposed permit is available at:

http://water.epa.gov/polwaste/npdes/stormwater/upload/msgp2008_finalpermit.pdf

It is anticipated that the next MSGP permit will also have NOI submittal deadlines. A sign up to receive the Federal Register Table of Content Notices announcing the availability of the Final MSGP Permit is available at:

http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR

Associated Pollutants

USEPA's 1995 MSGP lists pollutants associated with the various regulated sectors. For Sectors J and C, the following USEPA Industrial Stormwater Fact Sheets provide a brief summary of the NPDES industrial stormwater permitting program, the types of facilities included in that sector, a summary of typical pollutants associated with each sector, and types of stormwater control measures (or Best Management Practices) used to minimize the discharge of those pollutants:

http://water.epa.gov/polwaste/npdes/stormwater/upload/sector_j_mineralmining.pdf
http://water.epa.gov/polwaste/npdes/stormwater/upload/sector_c_chemical.pdf

Examples of pollutant listed in the USEPA Industrial Stormwater Fact Sheet J associated with mineral processing activities (e.g., rock sorting, rock crushing, raw material storage, waste rock storage, raw material loading, processing materials unloading, raw or waste material transportation) include dust and fines, total suspended solids (TSS), total dissolved solids (TDS), turbidity, pH, diesel/gas fuel, and oil. Pollutants listed in the USEPA Industrial Stormwater Fact Sheet C associated with material handling and storage, and equipment storage are dependant upon the materials at a particular facility. Pollutants associated with vehicle fueling and maintenance include TSS, TDS, oil and grease, gasoline, diesel, acid, and coolant.

Requirements that apply to the specific subsectors are in Part 8 of the 2008 MSGP include the following benchmark monitoring and concentrations:

Subsector J2
Nonmetallic Minerals Mining (SIC 1499)
Total Suspended Solids (TSS) 100 mg/L

Subsector C1
Agricultural Chemicals (SIC 2879)
Nitrate plus Nitrite Nitrogen 0.68 mg/L
Total Lead (Hardness Dependent)
Total Iron 1.0 mg/L
Total Zinc (Hardness Dependent)
Phosphorus (2.0 mg/L)

On-Site Industrial Activities

Based on the USGS topopgraphy map (Figure 1) and information from operator representatives, the site was a former sawmill incinerator. Ms. Vandenburg did not know the exact date that humate processing for agricultural chemicals and soil conditioner products occurred at the site, but she indicated that it was after the time that Menefee Mining Corporation filed with the State of New Mexico. Menefee Mining Corporation is an active corporation in the State of New Mexico with a filing date of June 26, 1991 according to State of New Mexico Office, Secretary of State on-line corporation query at:

https://portal.sos.state.nm.us/corps/(S(jblmoq0cq31wvfhjnrwktlwd))/Corplookup/Lookdn.aspx.

Off-site mined humate is trucked to the Cuba Production Facility and processing includes dry granular (screening and bagging) and wet soluble operations. In the wet operations, potable drinking water from the Village of Cuba is applied to screened humate then the humate is dried. Other chemicals or materials added to humate products include tetrapotassium pyrophosphate (TKPP), materials derived from TKPP (e.g., Innophos labeled with available phosphoric acid and soluble potash), surfactants, iron and urea depending upon the specifications of the final agricultural or soil conditioner product.

On the day of this CEI (see photos), the site had processing and raw materials storage industrial activities, including outside storage and stockpiling of materials (e.g., overburden, raw material, intermediate products, finished products, byproducts and/or waste products) and material handling that would come into contact with stormwater from humate milling and preparation. Observed chemicals that are blended with the humate were within covered buildings on the day of this CEI. Vehicle fueling and maintenance occurs on site. Vehicle maintenance activities appeared to be within covered buildings on the day of this CEI. Overflows (non-stormwater) from the water soluble operation drinking water tanks are collected, then piped (gravity flow) outside the building on the ground surface.

The portion of the dirt Duke City County Road from NM 11 to the facility's entrance is maintained (graded) by Menefee Mining Corporation. Berms existed along the northern facility boundary along the Duke City Road to minimize stormwater run on according to the Mr. Valdez and Ms.Vandenburg. The berms appear to be humate waste materials and could be a source of potential pollutants along the county road roadway ditches. South-southwest west of outside processed humate material and waste humate storage, an earth berm collects runoff. The earth berm also collects upland and upstream water in the watershed. Mr. Valdez and Ms. Vandenburg did not know the design size or amount of water that could be collected by the earth berm in the south-southwest portion of the facility.

Menefee Mining Corporation property continues west from the fenced humate production facility to County Road 11. Observed wood, trash and debris west of the humate production facility may be from past sawmill activities according to Mr. Valdez. Ms. Vandenburg described that she did not have information on potential contaminates from past activities at the site. Ms. Vandenburg also described that windblown humate dust could exist at the site.

Findings

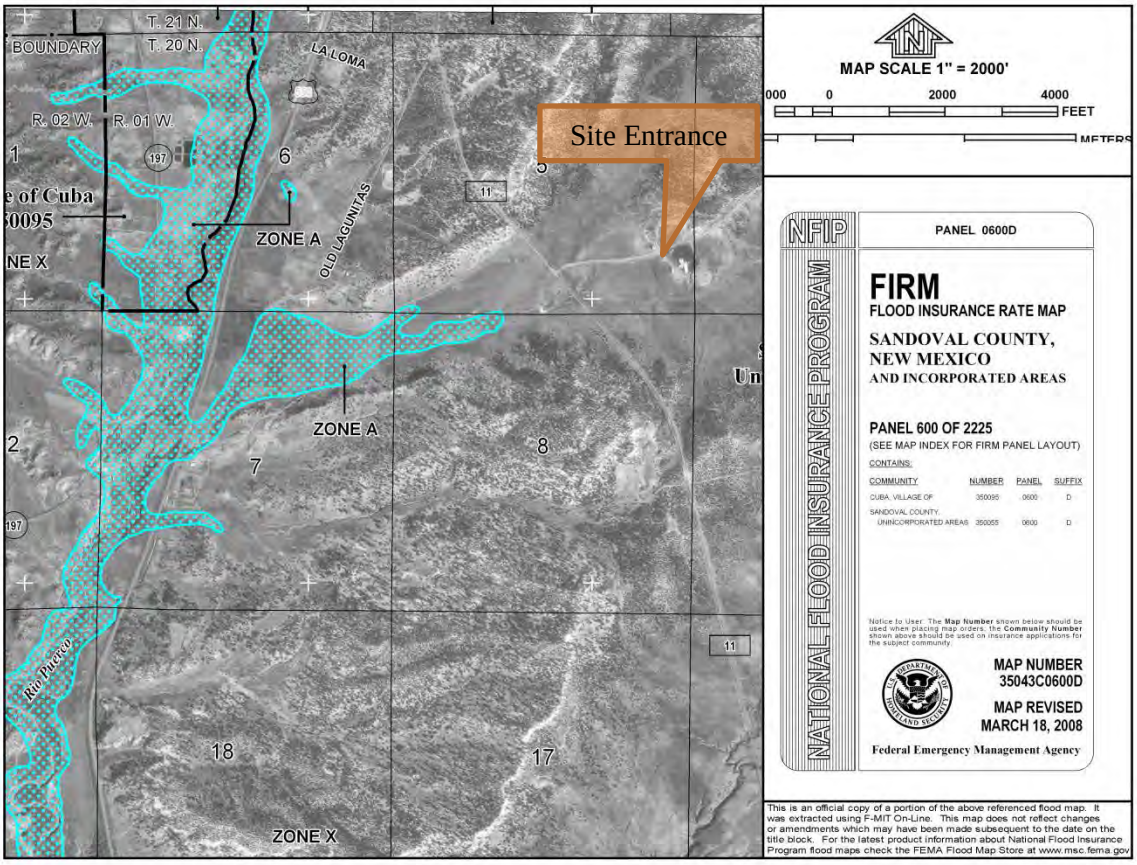
- Menefee Mining Corporation did not submit a NOI to obtain coverage for the Cuba Humate Production Facility at the above-described location under the USEPA NPDES Industrial Stormwater MSGP by the deadline of the 1995, 2000 or 2008 MSGP or the expiration date of September 29, 2013 of the 2008 MSGP.

- Evaluation and implementation of additional control measures (e.g., best management practices, minimizing exposure, erosion and sediment controls, including stabilization, management of runoff, etc.) appeared needed to minimize contact between stormwater and potential pollutants (e.g., exposed humate product, humate waste materials, non-stormwater, fuel storage and fueling areas, other waste and tires, road maintenance, past activities, etc.).

Figure 1: General Location Map
Menefee Mining Corporation – Cuba Humate Production Facility

Figure 2: Site Location
Menefee Mining Corporation – Cuba Humate Production Facility

Figure 3: Location of Site relative to Flood Insurance Rate Map Zone A
Menefee Mining Corporation – Cuba Humate Production Facility



Note: Per Federal Emergency Management Agency (FEMA) on-line definitions and descriptions at https://www.fema.gov/floodplain-management/zone, Zone A is the flood insurance rate zone area *"subject to inundation by the 1-percent annual chance flood event."*

NMED/SWQB Official Photograph Log Photo # 1		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1304 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Arrow points to pipe outlet. Overflow from filing water tanks inside building flows onto ground surface at this outlet according to Mr. Valdez.		

NMED/SWQB Official Photograph Log Photo # 2		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1312 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Looking south-southwest at humate waste material according to Mr. Valdez in the northeast portion of the facility. In foreground, vegetation is growing on humate waste material.		

NMED/SWQB Official Photograph Log Photo # 3		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1314 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Berm on facility side of Duke City Road appears to be made of humate waste material. Berm was installed to minimize stormwater run onto the facility.		

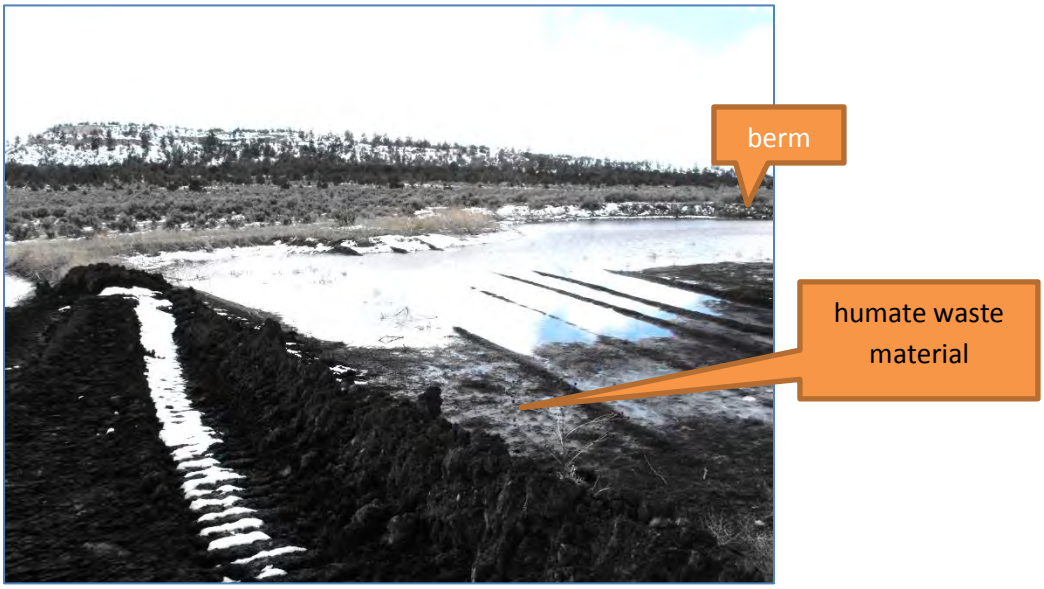
NMED/SWQB Official Photograph Log Photo # 4		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1318 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Arrow points to liner beneath aboveground fuel storage tanks. Humate covered ground surface.		

NMED/SWQB Official Photograph Log Photo # 5		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1320 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Arrows point to stockpiles of finer screened humate material product beneath conveyer and bagging operations. Humate covered ground surface.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1322 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Arrows point to stockpiles of finer and coarser screened humate material product. Humate covered ground surface.		

NMED/SWQB Official Photograph Log Photo # 7		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1328 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Arrows point to examples of concrete debris and tires in humate waste material.		

NMED/SWQB Official Photograph Log Photo # 8 (Brightness increased 30%, Contrast increased 20%)		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1329 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Water collected upgradient of berm in south-southwest portion of facility. Humate waste materials exist in pond area.		



NMED/SWQB Official Photograph Log Photo # 9		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1330 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: Looking generally east, edge of humate waste material and vegetation in southern portion of faciliy.		

NMED/SWQB Official Photograph Log Photo # 10		
Photographer: Daniel Valenta	Date: 03/04/2015	Time: ~1340 hours
City/County: Cuba / Sandoval County		State: New Mexico
Location: Menefee Mining Corporation, Cuba Humate Production Facility		
Subject: From Hwy 11 approximately 0.25 miles southwest, looking north-northeast at overview of facility.